

**NEW EPA DRINKING WATER STANDARDS ADOPTED**

By Mike Grimm, PE

Two new rules have emerged from the US Environmental Protection Agency that will improve drinking water quality standards. The first is the Interim Enhanced Surface Water Treatment Rule (IESWTR), published in the Federal Register on December 16, 1998, and is designed to address the health risks from microbial contaminants without significantly increasing the potential risks from chemical contaminants. The second rule, the Stage 1 Disinfectants/Disinfection Byproducts Rule (Stage 1 DBPR), was published concurrently with the IESWTR to control disinfectants and the formation of their byproducts.

*(continued on page 2)*

**Advance Notice!!  
 American Water Works Association  
 Seminar on These Two New Rules!  
 Right Here in Portland!**

When: June 8-9, 1999 (2 days, 0.6 CEU each day)

What: June 8 - Disinfection by-products  
 June 9 - Interim enhanced surface water treatment

Where: Portland, Oregon!  
 (Double Tree Hotel - Columbia River)  
 Hotel Reservation Deadline: 5/24/99

Seminar Registration Cost: \$90 for one day for small systems, \$275 for two days for large systems

More Info: Call AWWA D/DBP-IESWTR Seminars, phone (800) 926-7337 and select "3" for seminar information, then "2" for hotel/registration information

This is a unique opportunity for you to attend a national level conference with national expert presenters, tailored to our region, right here in Oregon! Learn how to comply with these complex regulations and what impact the rules will have on you. Learn the implementation strategies that apply to the water quality and treatment practices in our region, and get the tools to make sure you are ready to comply. Attend Day 1 if you add a disinfectant to your water (or think you may have to in the future) or both days if you use surface sources, particularly serving over 10,000 people. Day 1 includes an update on the upcoming Groundwater Rule. Don't miss this opportunity - it may be the best one you get!

**Notice - Unregulated Contaminant Monitoring Comes To An End!  
 (for now....)**

EPA has suspended current unregulated contaminant monitoring requirements for water systems serving 10,000 or fewer people, effective March 9, 1999. A new Unregulated Contaminant Monitoring Rule is expected to be proposed in late March, 1999, and finalized in August, 1999. The rule will require a representative number of systems serving 10,000 or fewer people, and all larger systems, to monitor for up to 30 contaminants from the Contaminant Candidate List. EPA will provide for the monitoring and lab analyses for the selected small systems. So, you need conduct no further unregulated contaminant monitoring until this new rule is finalized! Your labs have already been notified.

**NEW TECHNICAL ASSISTANCE  
 CIRCUIT RIDERS ARRIVE AT THE  
 DRINKING WATER PROGRAM**

By Mike Grimm, PE

During the month of April, DWS will introduce two new circuit riders for small community water systems in Oregon. Funded with a portion of the Drinking Water State Revolving Fund (called a "set-aside" fund), the circuit riders will be providing statewide training and one-on-one technical assistance for communities under 10,000 population. The Oregon Association of Water Utilities (OAWU) has been hired to work with the groundwater systems and EES Consulting, Inc. has been hired to provide technical assistance to those communities using surface water.

The key element that each organization will provide will be known as a Resolution Plan for a community water system. The Resolution Plan is intended to help the communities understand what parts of the water system are in need of repair or bolstering, how to proceed with improvement, and what the cost of improvement will be. This technical service is being offered free of charge to the communities.

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EPA Standards (continued from page 1)

**Background History of both Rules**

One of the key regulations EPA has developed to date to counter pathogens in drinking water is the 1989 Surface Water Treatment Rule (SWTR). Among its provisions, the rule requires that a surface water system have sufficient treatment to reduce the source water concentration of *Giardia lamblia* and viruses by at least 99.9 percent (3 log) and 99.99 percent (4 log), respectively. The goal of the SWTR is to reduce risk to less than one infection per year per 10,000 people. However, the SWTR's limitation is that the source water of some systems has high pathogen concentrations that, when reduced by the levels required under the rule, still may not meet this health goal, and the rule does not specifically control for the protozoan *Cryptosporidium*.

Many water systems treat their water with a chemical disinfectant in order to inactivate pathogens that cause disease. The public health benefits of common disinfection practices are significant and well-recognized. However, disinfection poses risks of its own. While disinfectants are effective in controlling many harmful microorganisms, they react with organic and inorganic matter (disinfection byproduct precursors - DBPPs) in the water and form DBPs, some of which pose health risks at certain levels. Since the discovery of chlorination byproducts in drinking water in 1974, numerous toxicological studies have been conducted that show DBPs to be carcinogenic and/or cause reproductive or developmental effects in laboratory animals. Additionally, exposure to high levels of disinfectants over long periods of time may cause health problems, including damage to blood and kidneys. While many of these studies have been conducted at high doses, the weight-of-evidence indicates that DBPs present a potential public health problem that must be addressed. One of the most complex questions facing water supply professionals is how to reduce risks from disinfectants and DBPs while providing increased protection against microbial contaminants. Much of the population is exposed to these risks. Therefore, a substantial concern exists.

Health risks associated with some DBPs are currently addressed by the regulation of total trihalomethanes (TTHM) at public water systems (PWSs) serving 10,000 or more people. EPA, however, believes that the promulgation of the Stage 1 DBPR will significantly decrease the risks posed by DBPs and disinfectants. The Stage 1 DBPR will broaden public health protection by covering many PWSs not currently regulated for TTHM or other DBPs.

**Development of the IESWTR & Stage 1 DBPR**

The new rules are a product of 6 years of collaboration among the water supply industry, environmental and

public health groups, and local, State, and Federal governments. To address the complex issues associated with regulating microbial pathogens, EPA first launched a rule-making process in 1992 and convened a Regulatory Negotiation (RegNeg) Advisory Committee under the Federal Advisory Committees Act (FACA), representing a range of stakeholders affected by possible regulation. The RegNeg Committee met repeatedly over a period of 10 months and arrived at a consensus proposal for taking progressive steps toward addressing both DBPs and microbial pathogens. The 1992 consensus-building process resulted in the three following regulatory proposals:

- 1) A staged approach to regulation of DBPs (referred to as the Stage 1 and Stage 2 DBPRs) incorporating Maximum Contaminant Levels (MCLs), Maximum Residual Disinfectant Levels (MRDLs), and treatment technique requirements;
- 2) A companion IESWTR designed to improve control of microbial pathogens and prevent inadvertent reductions in microbial safety as a result of DBP control efforts; and,
- 3) An Information Collection Rule (ICR) to collect information necessary to reduce many key uncertainties prior to subsequent negotiations for the Stage 2 DBPR.

Congress amended the Safe Drinking Water Act (SDWA) in 1996 and affirmed the strategy developed by the RegNeg Committee. Congress also established a series of new statutory deadlines for the rules.

In 1997, a similar FACA process was implemented with the M-DBP Advisory Committee. The M-DBP Committee convened to collect, share, and analyze new information available since 1994, review previous assumptions made during the RegNeg process, as well as build consensus on the regulatory implications of this new information. The IESWTR & the Stage 1 DBPR, as structured today, are the results of the FACA process.

**Applicability and Key Dates for the IESWTR**

The IESWTR applies to *community water systems (CWSs) that use surface water or ground water under the direct influence of surface water (GWUDI) as a source and serve 10,000 or more people*. Systems must comply with the turbidity and monitoring & treatment technique requirements of the rule no later than December 17, 2001 (36 months after publication of the rule). However, PWSs with elevated levels of DBPs (Total Trihalomethanes - TTHM; and five haloacetic acids - HAA5) are required to develop an evaluation of their existing disinfection practices - a *disinfection profile* - no later than March 16, 2001 (27 months after publication). The timetable for the IESWTR is presented in Figure 1.

**Figure 1: PWS Timetable for the IESWTR Requirements**

Date from Rule Publication	Rule Requirement
December 16, 1998	Rule is published in Federal Register.
March 1999	TTHM and HAA5 monitoring may begin for systems that do not have ICR or occurrence data and wish to determine if they must develop a disinfection profile. All impacted systems must inform OHD whether the water system will conduct 4 quarters of TTHM and HAA5 monitoring or begin developing a disinfection profile.
April 1999	Systems that have 4 consecutive quarters of HAA5 occurrence data that meet the TTHM monitoring requirements must submit those data to the State to determine if they must develop a disinfection profile.
December 1999	TTHM and HAA5 data are due for those systems that collected data under the ICR to determine if they must develop a disinfection profile.
December 1999	Systems that wish to request OHD approval of "a more representative annual data set" than the ICR data set to determine if they must develop a disinfection profile must do so in writing.
March 2000	TTHM and HAA5 and monitoring must be complete for systems determining if they must develop a disinfection profile.
March 2000	Systems determining if they must develop a disinfection profile must submit their TTHM and HAA5 data to OHD.
March 2000	Systems must begin developing a disinfection profile if either their annual average TTHM $\geq 0.064$ mg/L or their annual average HAA5 $\geq 0.048$ mg/L.
March 2000	If system is using 3 years of existing operational data to develop the disinfection profile, the profile generated from these data and a request for State approval must be submitted.
March 2001	Disinfection profile is complete.
December 2001	Treatment technique requirements of IESWTR apply to surface water & GWUDI systems that serve at least 10,000 people.
December 2001	Systems that were required to develop a disinfection profile that wish to make a significant change to their disinfection practice after this date must first calculate a disinfection benchmark and consult with OHD.
December 2001	Systems that are not required to filter must comply with the existing requirements for TTHM until this date. After this date, systems must comply with the new requirements TTHM, HAA5, bromate, chlorite, chlorine, chloramines, and chlorine dioxide.
December 2001	Systems that use conventional/direct filtration must meet the turbidity requirements of the rule (0.3 NTU 95 percent of the time, at no time exceed 1 NTU).
December 2001	Alternative technologies for systems that serve at least 10,000 people must remove 99 percent of <i>Cryptosporidium</i> , and achieve alternative turbidity performance standards 95 percent of the time.
December 2001	Systems must comply with the reporting and recordkeeping requirements of §141.175, including turbidity exceptions reporting. Systems must, when appropriate: <ul style="list-style-type: none"> <li>• Produce filter profiles or identify obvious reason for poor filter performance</li> <li>• Report profile has been produced or identify obvious reason for poor filter performance</li> <li>• Conduct filter self-assessments</li> <li>• Have 3<sup>rd</sup> party CPEs performed</li> </ul>

### Applicability and Key Dates for the DBP Rule

The existing TTHM requirements apply only to systems serving 10,000 or more people. The Stage 1 DBPR covers a larger number of PWSs, applying to *all CWSs and nontransient noncommunity water systems (NTNCWSs) that treat their water with a chemical disinfectant for either primary or residual treatment*. In addition, certain requirements apply to transient noncommunity water systems (TNCWSs) that use chlorine dioxide.

The compliance dates for Stage 1 DBPR are December 16, 2001 and December 16, 2003. Surface water and GWUDI systems that serve 10,000 or more people will have to comply with the provisions of the rule beginning December 16, 2001. Surface water and GWUDI systems that serve fewer than 10,000 people and all ground water systems will have to comply with the provisions of the rule beginning December 16, 2003. The timetable for the Stage 1 DBPR is presented in Figure 2.

### Requirements of the IESWTR

#### *Disinfection profiling and benchmarking*

Surface water or GWUDI systems having average annual TTHM  $\geq 0.064$  mg/L or annual average HAA5  $\geq 0.048$  mg/L must develop a *disinfection profile*. The disinfection profile is a compilation of daily inactivation data computed over the period of one year. From the disinfection profile, the PWS calculates the average microbial inactivation potential for each month, and the lowest monthly average inactivation becomes the *disinfection benchmark*. The purpose of these provisions is to provide a process whereby a PWS and OHD, working together, assure that there will be no significant reduction in microbial protection as the result of disinfection practice modifications designed to meet the more restrictive MCLs for DBPs established in the Stage 1 DBPR. Those PWSs required to develop disinfection profiles that choose to modify their disinfection practices to meet the new MCLs, must establish the disinfection benchmark and consult with OHD prior to implementing such modifications. In

**Figure 2: PWS Timetable for the Stage 1 DBPR Requirements**

Date from Rule Publication	Rule Requirement
December 16, 1998	Rule is published in Federal Register.
February 16, 1999	Methods specified in §141.131 for analyzing disinfection byproducts, disinfection residuals, and DBP precursors must be used.
December 2000	Large surface water and GWUDI systems may begin monitoring to determine Step 1 TOC removals before the compliance date.
December 2001	Large surface water and GWUDI systems must comply with the MCLs for TTHM, HAA5, bromate, and chlorite.
December 2001	Large surface water and GWUDI CWSs and NTNCWSs must comply with the MRDLs for chlorine, chloramines, and chlorine dioxide.
December 2001	Large surface water and GWUDI TNCWSs that use chlorine dioxide must comply with the MRDL for chlorine dioxide.
December 2001	Requirements of the DBP Rule generally apply to large surface water and GWUDI CWSs and NTNCWs. <ul style="list-style-type: none"> <li>• Monitoring requirements</li> <li>• Reporting and recordkeeping requirements</li> <li>• Compliance</li> <li>• Treatment technique for control of DBP precursors</li> </ul>
December 2001	Large surface water and GWUDI TNCWSs that use chlorine dioxide must comply with requirements for chlorine dioxide and chlorite.
December 2002	Small surface water and GWUDI systems may begin monitoring to determine Step 1 TOC removals before the compliance date.
December 2003	Small systems using surface water and all remaining ground water systems must comply with the MCLs for TTHM, HAA5, bromate, and chlorite.
December 2003	Small surface water and GWUDI and ground water CWSs and NTNCWSs must comply with the MRDLs for chlorine, chloramines, and chlorine dioxide.
December 2003	Small surface water and GWUDI and ground water TNCWSs that use chlorine dioxide must comply with the MRDL for chlorine dioxide.
December 2003	Requirements of the DBP Rule generally apply to small surface water and GWUDI and ground water CWSs and NTNCWs. <ul style="list-style-type: none"> <li>• Monitoring requirements</li> <li>• Reporting and recordkeeping requirements</li> <li>• Compliance</li> <li>• Treatment technique for control of DBP precursors</li> </ul>
December 2003	Small surface water and GWUDI and ground water TNCWSs that use chlorine dioxide must comply with requirements for chlorine dioxide and chlorite.
June 2005	Systems that made a clear and irrevocable financial commitment before the applicable compliance date to install technologies that limit TTHM and HAA5 to 0.040 mg/L and 0.030 mg/L, respectively, must have these technologies installed and operating.

addition, PWSs must keep the disinfection profile on file for OHD to review during a routine sanitary surveys.

***Cryptosporidium***

The IESWTR sets a maximum contaminant level goal (MCLG) of zero for the protozoan *Cryptosporidium*. It also establishes a requirement for 2-log removal of *Cryptosporidium* for systems that must currently filter under the SWTR. Systems that use conventional or direct filtration are assumed to meet this requirement if they are in compliance with the strengthened turbidity performance standards for combined filter effluent in the IESWTR (discussed below). Systems that use slow sand or diatomaceous earth filtration are assumed to meet the 2-log removal requirement if they are in compliance with the existing turbidity performance standards under the SWTR. The IESWTR also extends the existing watershed control requirements for unfiltered systems to include the control of potential sources of *Cryptosporidium*. Such sources must be included in an unfiltered system’s watershed control plan.

***Strengthened turbidity requirements for combined filter effluent water***

The IESWTR strengthens current treatment technique requirements for combined filter effluent for systems that use conventional or direct filtration. The turbidity level of a system’s combined filtered water at each plant must be less than or equal to 0.3 nephelometric turbidity units (NTUs) in at least 95 percent of the measurements taken each month, and the turbidity level of a system’s combined filtered water must at no time exceed 1 NTU (under the current treatment technique for filtered effluent, these turbidity requirements are 0.5 NTU and 5 NTU, respectively).

***Individual filter monitoring requirements***

The IESWTR introduces continuous turbidity monitoring for individual filters. Though there is no specific treatment technique violation associated with individual filter monitoring, the rule requires that surface water systems that use conventional or direct filtration must conduct continuous turbidity monitoring on the effluent of each individual filter. PWSs must

report instances of poor filter performance to OHD with the monthly turbidity report, and, based on performance triggers contained in the new rule, must take prescribed actions to identify and correct the cause(s). Those actions include filter self assessments (done by the water system) and comprehensive performance evaluations (done by OHD).

### Requirements of the Stage 1 DBP Rule

#### *MCLGs and MCLs for disinfection byproducts*

The Stage 1 DBPR sets maximum contaminant level goals (MCLGs) for some of the regulated DBPs, a more stringent MCL for TTHM, and new MCLs for HAA5, bromate, and chlorite. MCLGs are set at concentrations at which no known or anticipated adverse health effects are expected to occur. They are non-enforceable public health goals. MCLs are enforceable contaminant standards that are feasible to achieve.

Disinfection Byproduct	MCLG (mg/L)	MCL (mg/L)
Total Trihalomethanes (TTHM)		0.080
Chloroform	0	
Bromodichloromethane	0	
Bromoform	0	
Dibromochloromethane	0.06	
Five Haloacetic Acids (HAA5)		0.060
Monochloroacetic Acid		
Dichloroacetic Acid	0	
Trichloroacetic Acid	0.30	
Monobromoacetic Acid		
Dibromoacetic Acid		
Chlorite	0.80	1.0
Bromate	0	0.010

#### *MRDLGs and MRDLs for disinfectant residuals*

To protect against potential health risks caused by high levels of residual disinfectants, the Stage 1 DBPR sets the following maximum residual disinfectant level goals (MRDLGs) and maximum residual disinfectant levels (MRDLs). Like MCLGs and MCLs, respectively, MRDLGs are non-enforceable, while MRDLs are enforceable.

Disinfectant	MRDLG (mg/L)	MRDL (mg/L)
Chlorine	4	4.0
Chloramines	4	4.0
Chlorine Dioxide	0.8	0.8

#### *Treatment technique for disinfection by product precursors*

The rule includes a treatment technique that applies to systems serving a population of 10,000 or greater using conventional filtration technology. The treatment technique was established because disinfectants can react with DBPPs to form both regulated and non-regulated DBPs. The treatment technique requirements in the rule are designed to provide public health protection by minimizing the production of all DBPs. Compliance with the rule's treatment technique requirement can be achieved by removing specified percentages of Total Organic Carbon (TOC) using enhanced coagulation or enhanced softening. Alternatively, systems are compliant by showing they meet alternative performance criteria that indicate removal of DBPPs is unnecessary or impractical.

#### *Best available technology (BAT)*

EPA has specified the Best Available Technology (BAT) for each MCL and MRDL established in the rule. These technologies and methods are believed to be effective in controlling chemicals in drinking water while remaining economically feasible for PWSs to employ. PWSs must use the specified BAT if they wish to qualify for variances.

Chemical		Best Available Technology
DBPs	TTHM and HAA5	Enhanced coagulation or granular activated carbon (GAC 10), with chlorine as the primary and residual disinfectant
	Chlorite	Control of treatment processes to reduce disinfectant demand and control of disinfection treatment processes to reduce disinfectant levels
	Bromate	Control of ozone treatment process to reduce production of bromate
Disinfectants	Chlorine, chloramine, and chlorine dioxide	Control of treatment processes to reduce disinfectant demand and control of disinfection treatment processes to reduce disinfectant levels

For more information, contact EPA's Safe Drinking Water Hotline, (800) 426-4791, or see the Office of Ground Water and Drinking Water web page at <http://www.epa.gov/safewater/standards.html>.

OHD is only now beginning the lengthy and complex process of adopting these federal rules as state rules. Initially, OHD will develop a set of draft Oregon Administrative Rules which incorporate both new rules. Included in these rules are numerous requirements for states (called Special Primacy Requirements) which allow the states flexibility when implementing these rules. OHD will solicit significant public comment on all of these issues during official hearings and information workshops well in advance of any final version of the state's rules.

Mike Grimm, PE, is in the Drinking Water Protection Unit of the Drinking Water Program

Circuit Riders (continued from page 1)

More detailed information will be printed in the next *Pipeline* as the contract period commences. We would like to hear from you as this service gets underway. Please direct your comments to **Mike Grimm** at (503) 731-4317 or by E-mail at [michael.w.grimm@state.or.us](mailto:michael.w.grimm@state.or.us). Below is brief outline of areas and tasks on which both circuit riders will be working, and information on how to contact them directly:

**OAWU** (503) 873-8353  
(Communities w/Groundwater)

- Resolution Plans
- Cross Connection Program one-on-one technical assistance
- General cross connection control training sessions - statewide
- Water distribution training sessions
- On site trouble shooting of short term problems (leak detection & repair, etc.)

**EES Consulting, Inc.** (Lee Odell, (503) 223-5900)  
(Communities w/Surface Water)

- Resolution Plans
- Cross Connection Program one-on-one technical assistance
- General cross connection control training sessions - statewide
- Water treatment operations training sessions
- Revision of DWS Small Water System Training Course

Mike Grimm, PE, is in the Drinking Water Protection Unit of the Drinking Water Program

## EPA DEADLINE ON RISK MANAGEMENT PROGRAMS APPROACHES

By Carrie Gentry

Water systems that disinfect with chlorine gas should already be aware of EPA's Risk Management Program (RMP) Rule. The RMP rule is part of the Clean Air Act Amendments of 1990 and can be found in the June 20, 1996 Federal Register. The deadline for compliance with this rule is June 21, 1999.

In summary, the RMP rule requires certain facilities to register with EPA, develop a risk management program, and submit a summary risk management program. The legislation is rather complex, but any water system that utilizes chlorine gas as a disinfectant has the potential to be affected by this rule. The threshold quantity of chlorine gas for this rule is only 2500 lb.

Some water systems may opt to no longer use chlorine gas as a result of this legislation. This is a reminder that if a water system plans on switching to another form of disinfection (i.e.- from chlorine gas to sodium hypochlorite), plan review by the Health Division is required. For more information on the plan review process, please call (503) 731-4317. For more information on the RMP rule, please contact Lisa McArthur at the EPA at (206)553-0383 or visit EPA's website at [www.epa.gov](http://www.epa.gov).

Carrie Gentry, EIT, is Regional Engineering Assistant in the Field Services Unit of the Drinking Water Program

## CLARIFICATION OF GOVERNOR'S WAIVER OF MAILING REQUIREMENT FOR CONSUMER CONFIDENCE REPORTS (CCRs)

By Mike Patterson

The EPA Consumer Confidence Report Rule specifies that the Governor of a state can grant a waiver to permit water systems serving fewer than 10,000 persons to publish their report in the newspaper instead of mailing it to their consumers. On February 17, 1999, the Drinking Water Advisory Committee decided not to seek the Governor's approval of this waiver at this time because of potential complication of the implementation process, and because of the potential benefits of issuing the reports direct to consumers. The committee will revisit the idea of a mailing waiver after the first year or two of experience with direct mailing to consumers.

Mike Patterson, RS, is in the Monitoring & Compliance Unit of the Drinking Water Program

**WATER SYSTEMS IN THE NEWS**City of Myrtle Point - Water Pretreatment System  
By Garrett Pallo

City of Myrtle Point - The City relies on the Nork Fork of the Coquille River as its raw water supply source. Due to high runoff during winter rain events, turbidity in the river often rises to between 200 and 300 ntu and has been measured as high as 450 ntu. In an effort to reduce the TSS and debris loading along with turbidity, the City chose to pioneer the use of Amiad water filtration equipment. The first in the United States to use Amiad Water System Technology on a municipal water system, the facility has proven to be effective in reducing the debris loading significantly and lowering raw water turbidity by more than 50 percent. The City's water treatment plant is now able to produce more water under highly turbid conditions where previously, the plant was shut down until the storm event subsided. The entire facility was constructed for approximately \$225,000 and has a capacity in excess of 1,200 gallons per minute.

Garrett Pallo is with The Dyer Partnership Engineers & Planners, Inc. in Coos Bay

**CROSS CONNECTION UPDATE**

By Bonnie Waybright, PE

The current list of approved backflow assemblies is dated 1999. The list will be updated annually with addendums added quarterly. Call (503)731-4899 to request a copy.

**Certification Renewal**

Backflow Assembly Tester and Cross Connection Inspector certificates expire on **June 30, 1999**.

**Testers** will need to submit proof of successful completion of a Backflow Assembly Tester Recertification (completed after June 30, 1997), proof of test gauge accuracy verification (dated July 1, 1998 or later), and the renewal fee. Backflow Assembly

Tester Recertification classes used for the 1997-99 certificate will not be accepted for the 1999-2001 certificate, even if they were completed after June 30, 1997.

**Inspectors** will need to submit proof of attendance at a Cross Connection Inspector Update (completed after June 30, 1997), or proof of 0.5 CEUs of cross connection related training (completed after June 30, 1997), with the renewal fee. Proof of CEUs must include documentation of the cross connection content of the training received. Cross Connection Inspector Update classes and CEUs used for the 1997-99 certificate will not be accepted for the 1999-2000 certificate, even if they were completed after June 30, 1997.

**Testers and Inspectors** who do not work exclusively for a water supplier must be registered with the Construction Contractors Board (CCB) or licensed by the Landscape Contractors Board (LCB) to be eligible for renewal. This requirement is the result of a change in ORS 448.279 that occurred in 1997. Call the CCB/LCB at (503)378-4621 ext. 4900 for more information.

Renewal forms will be mailed out in late April. A \$50.00 late fee will be assessed to all applications received after July 31, 1999.

**Spill Resistant Vacuum Breaker Assembly (SVBA)**

A new type of backflow prevention assembly has recently been approved. The SVBA is now approved for use in Oregon. The SVBA is very similar to the pressure vacuum breaker assembly, but the testing procedure is different. Certified backflow assembly testers in Oregon have been exposed to the test procedure at tester courses and recertification classes over the past few years, but until now have not been examined on it. Certified testers will now be required to demonstrate proficiency on this new test procedure at tester courses and recertifications.

**1998 Annual Summary Report**

We are now past the due date for the 1998 Annual Summary Report (ASR). Community water systems that have failed to report will soon be getting a notice from the Health Division. Every year the Health Division receives requests for extensions for filing the ASR. Some of these requests are from systems needing more time to finish their backflow assembly testing. Extensions are not granted in these cases. Remember that the 1998 ASR is for the *1998 calendar year*. Any backflow assembly tests done in 1999 cannot be reported on the 1998 report.

Bonnie Waybright, PE, is in the Technical Services Unit of the Drinking Water Program



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 Portland OR 97293-0450

PERIODICALS  
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## TRAINING CALENDAR

### Oregon Assoc. of Water Utilities

(503) 873-8353

Apr. 23 Water Rights  
 June 15 Confined Space

### OCT, Inc.

Katie Lewis/(888) 863-8916

Apr. 12-16 Water Plant Operator's  
 Certification Review

### Clackamas Community College

Michelle Meyer/(503) 657-6958 ext. 2388

June 15-17 Water Works Short School

### Cross Connection/Backflow Courses

Backflow Management Inc. (B)  
 (503) 255-1619

Clackamas Community College (C)  
 (503) 657-6958 ext. 2364

### Backflow Assembly Tester Course

May 17-21 Portland (B)  
 June 7-11 Oregon City (C)

### Backflow Assembly Tester Retraining/ Recertification

Apr. 30 Oregon City (C)  
 May 6-7 Oregon City (C)  
 May 13-14 Oregon City (C)  
 May 21 Portland (B)  
 May 21 Oregon City (C)  
 June 4 Portland (B)  
 June 4 Oregon City (C)  
 June 5 Portland (B)  
 June 18 Oregon City (C)  
 June 19 Bend (B)  
 June 30 Portland (B)

### Cross Connection Inspector Course

Apr. 12-15 Oregon City (C)  
 Apr. 19-22 Portland (B)

### Cross Connection Inspector Update

Apr. 16 Oregon City (C)  
 June 3 Portland (B)

### Water System Training Course

Oregon Health Division  
 Roberta Lindgren/(503)731-4317  
 Apr. 14 Grants Pass  
 Apr. 21 Hillsboro  
 June 11 Sandy

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